

## ABSTRACT OF THE DISCLOSURE

An integrated digital x-ray diagnostic system and a method for conducting dental radiography which includes optimizing exposure settings based on certain physical parameters of a patient, communicating the operational status of the x-ray generator and the exposure settings directly to the a CCD sensor without radiation sensitive detector elements, and supplying various viewing stations with image data thereby improving dental office workflow. The activation of the sensor and the x-ray source are coordinated so as to avoid pre-integration of charge in the image sensor, and at the same time reduce risk of over-exposure to the patient.